Amendment to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-14 (Canceled)

15. (Currently amended) A method for correcting positioning errors in rock drilling occurring in a drilling rig comprising a boom and a rock drill, the boom attached at one end thereof to a carrier and being turnable in relation to it about one or more joint axes of one or more respective joints, the rock drill being turnably mounted to another end of the boom, the apparatus arranged in a drilling position for drilling a hole in a way that the boom is controlled using control devices of the drilling rig wherein the boom is subjected to various movements until the boom is in a desired set position, wherein a deviation of the boom's actual ~~position~~ turning angle about one of said joint axes from a ~~calculated theoretical position~~ desired turning angle about said one of said joint axes is measured using a movement sensor, and the boom's position is corrected on the basis of the measured deviation, the method comprising the steps of:

A) storing, in a memory, a first set of deviations obtained by turning the boom through incremental turning angles about said one of said joint axes from a reference position to predetermined angularly spaced intervals about ~~a first of the joints~~ said one of said joint axes, and measuring using a movement sensor, for

each such interval, a deviation of the boom position from a desired incremental turning angle ~~theoretical position~~, and

B) using the stored first set of deviations during a subsequent drilling operation as correction values for locating the boom ~~in the~~ at the desired incremental turning angles ~~theoretical positions~~ corresponding to the respective predetermined angularly spaced intervals about ~~the first joint~~ said one of said joint axes.

16. (Currently amended) The method according to claim 15 wherein step A further comprises storing a second set of deviations obtained independently of the first set of deviations by turning the boom through incremental turning angles about a second one of said one or more joint axes of one or more respective joints from a reference position to predetermined angularly spaced intervals about ~~a second of the joints~~ said second one of said one or more joint axes and measuring using a movement sensor, for each such interval, a deviation of the boom position from a ~~theoretical position~~ desired incremental turning angle; step B comprising using the stored second set of deviations during the drilling operation as correction values for locating the boom ~~in the theoretical positions~~ at the desired incremental turning angles corresponding to the respective predetermined angularly spaced intervals about ~~the second joint~~ said second one of said one or more joint axes.

17. (Currently amended) The method according to claim 15 wherein an outer section of the boom is linearly extendable and retractable relative to an inner section thereof, step A further comprising storing another set of deviations obtained independently of the first set of deviations by moving the outer section from a reference position to linearly spaced intervals and measuring, for each linearly spaced interval, a deviation of the boom outer section from a ~~theoretical~~ desired position; step B comprising using the stored other set of deviations during the drilling operation as correction values to locate the boom in the ~~theoretical~~ desired positions corresponding to the linearly spaced intervals.

18. (Previously presented) The method according to claim 15 wherein deviations occurring at a location between two of the angularly spaced intervals is determined by calculating an approximation based upon the measured deviations at the two angularly spaced intervals.

19. (Currently amended) Rock drilling apparatus comprising a carrier, a boom having a first end attached to the carrier and turnable about respective joints in relation to the carrier, a rock drill attached turnable to the other end of the boom, joint sensors indicating the positions of the boom joints, and control devices for controlling the boom for movement to a drilling position for drilling a hole, the apparatus further comprising:

a memory device for storing a first set of deviations obtained by turning the boom through incremental turning angles about a first joint axis of the joints from a

reference position to predetermined angularly spaced intervals about ~~a first~~ said first joint axis of the joints, and measuring using a movement sensor for each such interval a deviation of the boom position from a ~~theoretical~~ desired position, and

a calculating device operable during a drilling operation for using the stored first set of deviations as correction values for locating the boom in the ~~theoretical~~ desired positions corresponding to the respective intervals about the first joint axis.

20. (Currently amended) The apparatus according to claim 19 wherein the memory device is operable to store a second set of deviations obtained independently of the first set of deviations by turning the boom through incremental turning angles about a second joint axis of said joints from a reference position to predetermined angularly spaced intervals about ~~a second of the joints~~ said second joint axis and measuring using a movement sensor, for each such interval, a deviation of the boom position from a ~~theoretical~~ desired position; the calculating device being operable to use the stored second set of deviations during the drilling operation as correction values for locating the boom in the ~~theoretical~~ desired positions corresponding to the respective intervals about the second joint axis.

21. (Currently amended) The apparatus according to claim 19 wherein an outer section of the boom is linearly extendable and retractable relative to the inner section

thereof, the memory device being operable to store another set of deviations obtained independently of the first set of deviations by moving the outer section from a reference position to linearly spaced intervals and measuring, for each linearly spaced interval, a deviation of the boom outer section from a ~~theoretical~~ desired position; the calculating device being operable to use the stored other set of deviations during the drilling operation as correction values to locate the boom in the ~~theoretical~~ desired positions corresponding to the linearly spaced intervals.

22. (Currently amended) The apparatus according to claim 19 wherein the first joint axis is parallel to a rotary axis of the rock drill.

23. (New) A method for correcting positioning errors in a rock drilling rig, the rock drilling rig comprising:

a boom attached at one end to a carrier and being rotatable in relation to the carrier about a plurality of joints;

a rock drill being turnably mounted to the other end of the boom; and

control devices for controlling the boom through various positions until the boom is set in a drilling position for drilling a hole;

wherein a deviation of the boom's drilling position is measured from a calculated theoretical position of where the boom should be located for drilling, and the boom's drilling position is corrected on the basis of the measured deviation, the method comprising the steps of:

storing in memory, a set of deviations obtained by turning the boom through the various positions and measuring, at predetermined angular intervals about at least one joint, the deviation of the boom's position from a calculated theoretical position at each interval, and

using the set of stored deviations to correct the drilling position of the boom relative to the at least one joint.

24. (New) The method according to claim 23, wherein the deviation of the boom position from the calculated theoretical position at each interval is measured in the turning direction of at least one joint between the boom and the carrier.

25. (New) The method according to claim 23, wherein the deviation of the boom position from the calculated theoretical position at each interval is measured as a function of the positions of two joints, in crossing position to one another, between the boom and the carrier.

26. (New) The method according to claim 25, wherein the deviation of the boom position from the calculated theoretical position at each interval is measured as a function of an angle of both joints so that at the theoretical points indicating the boom position in horizontal and vertical directions in a two-dimensional coordinate system, the deviation is defined as a function of the positions of the crossing joints.

27. (New) The method as claimed in claim 23, wherein the method is employed for rotations about each of the plurality of joints, such that a set of deviations and an error compensation function are provided for boom movements relating to each of the plurality of joints.

28. (New) The method according to claim 23, wherein the deviations corresponding to each joint position are measured at predefined angular intervals in a certain joint position value and, when positioning the boom to the drilling position, the calculated theoretical position of the boom is corrected on the basis of the deviations corresponding to the joint positions obtained in this way.

29. (New) The method according to claim 28, wherein the deviation between adjacent, stored joint positions of each turning movement is defined by calculating an approximation for the change of deviation from one position value to the other on the basis of the measured deviations between the said joint position values.

30. (New) The method according to claim 29, wherein the approximation for the deviation is calculated between the deviation values stored in a memory.

31. (New) The method according to claim 23, wherein deviation caused by at least one other movement is measured as a function of the value of a movement sensor, and

the theoretical position of the boom is corrected on the basis of the deviation corresponding additionally to this movement when positioning the boom to the drilling position.

32. (New) The method according to claim 31, wherein on a boom equipped with a rotation mechanism for turning the rock drill together with its feed beam around an axis parallel to the drilling axis, the deviation caused by the rotation movement is measured between the position of the boom at a point and the theoretically calculated position of the boom at that point and that the position of the boom is corrected on the basis of the deviations corresponding to positions of the boom as well as the joints between the boom and the carrier, and the position of the rotation mechanism.

33. (New) The method according to claim 23, wherein the deviations are stored as deviations of the drill bit position of the rock drill and deviations of the drilling direction determined by the drill steel axis.

34. (New) A rock drilling equipment, with a carrier, a boom having a first end attached to the carrier and turnable about respective joints in relation to the carrier, a rock drill turnably attached to the other end of the boom, joint sensors indicating the positions of the boom joints, and control devices for controlling the boom through various positions to reach the drilling position for drilling a hole, characterized in that it includes a memory device for storing a set of deviations obtained by turning the boom through the various positions and measuring, at predetermined angular intervals, about at least one joint, the

deviation of the boom's position from a calculated theoretical position at each interval, and a calculating device operable during a drilling operation for using the stored set of deviations as correction values for correcting the drilling position of the boom relative to the at least one joint.

35. (New) The rock drilling equipment according to claim 34, wherein the memory device is arranged to store the deviations between the position of the boom and the theoretical value calculated at each interval on the basis of the joint sensors as a function of the turning angles of two to one another crossing joints between the boom and the carrier, and the calculating device is arranged to correct the boom position on the basis of the deviations, stored in the said memory unit, corresponding to the position and indicated by the joint sensors of both joints.

36. (New) The rock drilling equipment according to claim 35, wherein the memory device is arranged to store the deviations in a two-dimensional coordinate system between the position of the boom and the theoretical position calculated at each interval on the basis of the joint sensors as a function of the positions of two crossing joints.

37. (New) The rock drilling equipment according to claim 34, equipped with a separate rotating mechanism for rotating the rock drill in relation to the boom end and about an axis that is parallel with the drilling axis of the rock drill, wherein the memory device is arranged to store the deviations between the position of the boom and the

theoretical position calculated at each interval on the basis of the joint sensors, as a function of the position of the rotation mechanism, and the calculating device is arranged to correct the boom position and the turning angles of the joints between the boom and the carrier and correspondingly the turning angle of the rotating mechanism on the basis of the corresponding deviations.